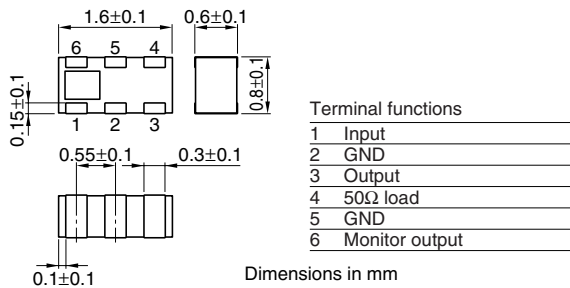


# Multilayer Chip Directional Couplers For 2.4GHz W-LAN

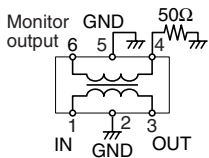
Conformity to RoHS Directive

HHM Series HHM2241SA1

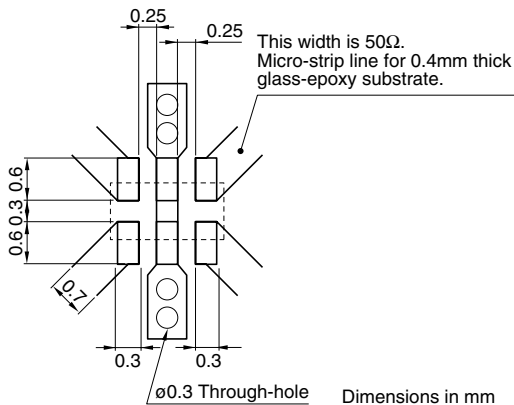
## SHAPES AND DIMENSIONS



## CIRCUIT DIAGRAM



## RECOMMENDED PC BOARD PATTERNS



## ELECTRICAL CHARACTERISTICS

Frequency range	2400 to 2500MHz	
Coupling factor	-12.0±1.0dB	
Insertion loss	0.45dB max.*1	
	0.50dB max.*2	
Isolation	22dB min.	
VSWR	1.5 max.	
Temperature range	Operating	-40 to +85°C
	Storage	-40 to +85°C

\*1 25°C

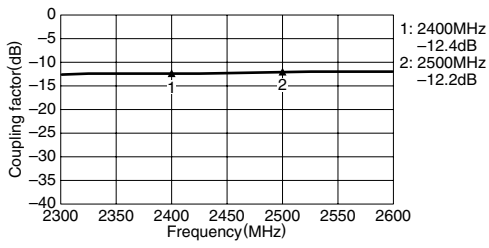
\*2 Operating temperature

• Conformity to RoHS Directive: This means that, in conformity with EU Directive 2002/95/EC, lead, cadmium, mercury, hexavalent chromium, and specific bromine-based flame retardants, PBB and PBDE, have not been used, except for exempted applications.

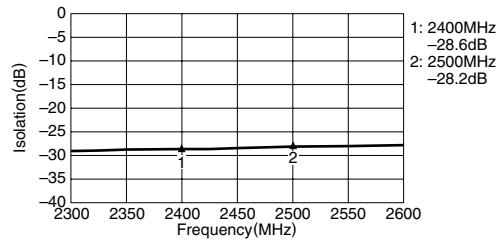
• All specifications are subject to change without notice.

### FREQUENCY CHARACTERISTICS

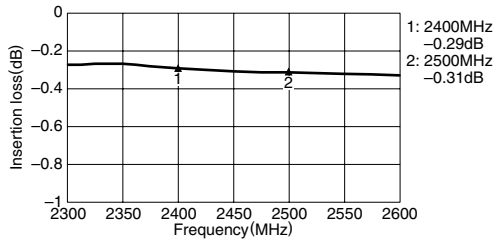
#### COUPLING



#### ISOLATION



#### INSERTION LOSS



#### VSWR

